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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,173	09/15/2006	Tomotsugu Matsui	Q119178	8722
23373 7590 11/15/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER STEPHENS, JACQUELINE F				
ART UNIT 3761		PAPER NUMBER		
NOTIFICATION DATE 11/15/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/593,173

**Applicant(s)**

MATSUI, TOMOTSUGU

**Examiner**

Jacqueline F. Stephens

**Art Unit**

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/10 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 7/21/10 have been fully considered but they are not persuasive. Applicant argues Cammarota and Timmonds do not disclose the claimed features because the cited prior art does not teach dispersed particles of the coloring agent between the hydrophilic resin coating layer and the absorbent. However, Cammarota in col. 15, lines 13-55 teach a multi-layered outer cover having laminate adhesives or a resin layer. Column 16, lines 28-41 teach active and permanent graphics located on the interior of the outer cover laminate. Thus, the resin layer and graphic or water-indicator layers are separate layers.

***Claim Rejections - 35 USC § 102/103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 9, 11, and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cammarota et al '119 and thereby, by incorporation, Timmons '211.

3. Claims 11 and 12: See '119 at the entire document, esp. the Figures and, e.g., col. 1, lines 41-54, col. 2, lines 11 et seq, and thereby, by incorporation, '211 at the col. 2, line 68-col. 3, line 4, col. 3, lines 33-34 and 59-61, col. 4, lines 6-10 and 40-47, col. 5, lines 21-66, and col. 6, lines 19-26, e.g. at least a hydrophilic resin coating layer (Note paragraphs bridging pages 10-12 of the instant application), '119 further at col. 3, lines 1-4 and 46-51, col. 7, lines 19-29, col. 5, lines 45-50, the paragraph bridging cols. 6-7, col. 8, lines 28-58, col. 9, lines 6-61, especially line 60, col. 11, line 40-col. 12, line 13, col. 12, lines 21-36, col. 15, lines 13-62, and col. 21, lines 26-48, i.e. '119 teaches an absorbent article 20 comprising, in integral form, at least a liquid permeable top/most upper sheet 42, an absorbent 44, a water vapor permeable waterproof sheet, i.e. a more upper sheet of cover 40, e.g. 116, see, e.g., again col. 15, lines 18-23 and col. 15, lines 37-38, and a liquid impermeable back sheet, i.e. a more outer sheet of cover 40, e.g. 114, see, e.g., again col. 15, lines 18-23 and col. 15, lines 37-38, in this order. The article further comprises a hydrophilic resin coating layer (see, e.g., portions of '211, esp. col. 5, lines 27-66, i.e. at least a portion of the binder, e.g. the binder is a water-soluble, i.e. "hydrophilic" as defined by the dictionary is "Having an affinity for,

absorbing, wetting smoothly with tending to combine with, or capable of dissolving in water", polyvinyl alcohol or carboxymethyl cellulose, i.e. CMC, (Note again the instant specification at the paragraph bridging pages 10-11)) which is provided on the side of the absorbent of the water vapor permeable waterproof, as best understood, see CLI, i.e. provided exteriorly of at least a portion of the absorbent and/or interiorly of at least a portion of the waterproof sheet (i.e. the binder is coated/layered on the cover between the absorbent and the water vapor permeable waterproof sheet, e.g. is provided on a portion of an inner surface of the water vapor permeable waterproof sheet, see portions of '119 cited supra, e.g. col. 21, lines 27-48, and not provided at another portion of the waterproof sheet), and an information mark (see col. 1, lines 41-45 of '119, i.e. informational graphics, e.g. the "active graphic" tint/dye/ink, see, e.g., Figure 5, element 85, or the "permanent graphic"/"segmentation graphic"/"background color graphic", see, e.g., Figure 5, element 92 and the cited portions of '119, and the mark is the dye (Note again the paragraph bridging pages 11-12 of the instant application)) provided on the side of the absorbent of the hydrophilic resin coating layer, as best understood, see CLI, i.e. provided exteriorly of at least a portion of the absorbent and/or interiorly of at least a portion of the coating layer (i.e. see again the cited portions of '119 and '211, i.e. mix/solution/dispersion of dye/binder, e.g. mix/solution/dispersion of dye, i.e. mark, in resin, i.e. provided exteriorly of at least a portion of the absorbent and/or interiorly of at least a portion of the coating layer) Cammarota in col. 15, lines 13-55 teach a multi-layered outer cover having laminate adhesives or a resin layer. Column 16, lines 28-41

teach active and permanent graphics located on the interior of the outer cover laminate. Thus, the resin layer and graphic or water-indicator layers are separate layers.

Claim 11 now also requires a permeability of the water vapor permeable waterproof sheet of a portion, which the hydrophilic resin coating layer is provided on the water vapor permeable waterproof sheet, being lower than a permeability of the water vapor permeable waterproof sheet of a portion, which the hydrophilic resin coating layer is not provided on the water vapor permeable waterproof sheet, as best understood, see CLI, i.e. the claimed sheet portion coextensive with the coating layer including a permeability which is lower than a second portion not having the coating layer or as interpreted in light of page 4, lines 12-17 and page 5, first full paragraph as filed, i.e. the combination first portion of the sheet with a resin thereon having a permeability lower than a second portion of the sheet without the resin thereon, i.e. no combination. See discussion of the resin *supra* with regard to the sheet and note the coating/layer of resin adds extra thickness to the portion it coats but not to portions it does not coat. Therefore, there is sufficient factual evidence for one to conclude that inherently there is or obviously there is a lower permeability at the coated/first portion than at the uncoated/second portion due to the increased thickness which the vapor needs to permeate through. (Note additionally, e.g., again the cited portions of '119, esp. col. 9, lines 21-25 and 50-61, the paragraph bridging cols. 17-18, col. 21, lines 29-48, esp. lines 33-35, and 46-47 ("permanent graphic"/"segmentation

graphic"/"background color graphic" may be on core or between core and vapor permeable layer while "active graphic", i.e. dye/mark/resin/binder, layer can be between the core and vapor permeable layer or on interior surface of vapor permeable layer) and, e.g., at least a portion of 92, i.e. there is sufficient factual evidence for one to conclude that or necessarily and inevitably conclude that the information mark can be on the surface of the absorbent assembly behind the binder/resin on the surface 112, see Figure 9B.)

Claim 9: Claim 9 further requires an ink layer disposed between the hydrophilic resin coating layer and the water vapor permeable waterproof sheet which is resistant to discoloration when exposed to water. See Claim Language Interpretation section supra, i.e. the claim does not require direct provision. See again discussion of claim 11. Therefore, there is sufficient factual evidence for one to conclude that there is or necessarily and inevitably is at least a portion/layer of permanent ink/dye, e.g., at least a portion of 92, e.g. a permanent segmentation graphic, is disposed between at least a portion of the hydrophilic resin/binder which resin/binder is a coating layer and water vapor permeable water proof sheet while at least a portion/layer of the mark/dye is disposed between at least a portion of the hydrophilic resin which resin/binder is a coating layer and the absorbent. Additionally, note, e.g., '119 also contemplates other permanent graphics, e.g. 81, 82, and active graphics, e.g. 89, 88, which can be positioned in various locations as discussed supra.

***Claim Rejections - 35 USC § 103***

12. Claim 8 is rejected under 35 U.S.C. 103(a) as obvious over Cammarota et al '119 and thereby, by incorporation, Timmons '211.

Claim 8: This claim requires the length and width of the hydrophilic resin coating layer be greater than the length and width of the information mark layer and the information mark layer and the hydrophilic resin coating layer have a thickness of 1 to 20 micrometers as best understood, see CLI. While '119 teaches a resin coating layer having a length and width greater than a length and/or width of the information mark layer, i.e. see, the discussion of claims 11 and 9 supra as well as, e.g., col. 11, lines 30-32, i.e. "can be" infers also can not be, element 81 or 82 in Figure 3 as compared to 88 and/or 89, it does not teach the claimed thickness. See however the discussion supra in paragraphs 8-9 supra as well as the paragraphs bridging pages 10-12 of the instant disclosure, i.e. no criticality of the claimed range for the combination, i.e. of about 1-20. Note again that '119 and '211 recognize the same problem, i.e. moisture indicating, as disclosed and also desire the same properties/combination of properties, e.g. visibility of indication in a limited use/disposable elastic, i.e. not hard, garment, as the instant application. Note also MPEP 2141.05. Therefore, it is the Examiner's second position that even if the prior art does not include the exact thickness range, the general conditions of the claim are disclosed thereby and it is not inventive, i.e. it would be obvious to one of ordinary skill in the art, to discover the optimum or workable ranges, i.e. Applicant's ranges, by routine experimentation, In re Aller, 105 USPQ 233 (CCPA 1955).



13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cammarota et al '119 and Timmons '211 in view of Ikeda et al '091.

This claim requires the water vapor permeable waterproof sheet be a sheet material in which a water vapor permeability (Note it does not require the entire sheet) is 7000 g/m<sup>2</sup>/24h as measured according to JIS Z-0208. While '119 at col. 12, lines 32-34 and col. 15, lines 13-62 teaches a vapor permeable waterproof porous polypropylene based resin film/layer, it does not teach the specific vapor permeability measured according to the specific test. However see '091 at paragraphs 1, 98, 101 and 111 for example. To make the vapor permeable waterproof porous polypropylene based resin film/layer sheet of '119 an vapor permeable waterproof porous polypropylene based resin film/layer as taught by '091 instead, if not already, would either be obvious, see In re Siebentritt, 54 CCPA 1083, i.e. two equivalents are interchangeable for the desired function, express suggestion of desirability not needed to render such substitution obvious, or be obvious to one of ordinary skill in the art in view of the recognition that such a sheet provides vapor permeability and the desire of such same properties in the cover by '119. In so doing the prior art would necessarily and inevitably teach the claimed article, i.e. the range "2000...or higher" includes 7000, note MPEP 2131.03 and 2144.05.

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cammarota et al '119 and Timmons '211 in view of Kolfta et al '904 and Yubuki et al '595.

This claim requires the hydrophilic resin coating layer comprises an ultraviolet absorbents, ultraviolet scattering agent, light stabilizer or antioxidant. While '119 and '211 teach a wetness indicator including a coloring agent and resin/binder, they do not teach such having such additives. See, however, e.g., paragraphs 2, 17, 86, 94 and 53-78 of '904 and 80, 26, 45-47 of '595, i.e. resin binder/coloring agent indicators include other additives including ultraviolet agents, stabilizers and antioxidants to enhance storage and/or performance during use, e.g. stabilizing/prevention of degradation of coloring agent. Therefore, to employ an additive, such as, e.g., an ultraviolet absorbent, ultraviolet scattering agent, light stabilizer or antioxidant as taught by '904 and '595 on the '119/'211 device would be obvious to one of ordinary skill in the art in view of the recognition that such would prevent degradation of the indicator, i.e. and thereby during use, and the desire of '119 to provide accurate indication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F. Stephens whose telephone number is (571) 272-4937. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacqueline F Stephens/  
Primary Examiner, Art Unit 3761